



Land west of Clifton Hampden – *IN DRAFT*

Updated Habitat Survey and Biodiversity Audit

July 2022

E2122r1



COMMISSIONED BY

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Land west of Clifton Hampden
Updated Habitat Survey and Biodiversity Audit

July 2022

Bioscan Report No.
E2122r1

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1 INTRODUCTION

1.1 Background

- 1.1.1 Bioscan (UK) Ltd was commissioned by Thomas Homes Ltd to produce a biodiversity audit of a site known as Land west of Clifton Hampden (hereafter the 'site'), which is proposed to be developed to housing, a new surgery and an extension of an existing village hall. The site comprises two parcels of land to the north and south of the A415 road, with the north parcel approximately centred on grid reference SU 5456 9568 and the south on SU 5447 9549.
- 1.1.2 An Ecological Appraisal was undertaken initially by BSG Ecology in June 2020, which provided an ecological baseline of the site, investigated the potential presence of protected species, assessed the ecological impacts of the proposed development and provided recommendations for mitigation and enhancement during and post-development.
- 1.1.3 The purpose of this report is to 'ground truth' and where necessary update the Phase 1 habitat survey in order to inform an assessment of the impact of the proposal on biodiversity using the Biodiversity Net Gain (BNG) Metric 3.1.

2 METHODS

2.1 Habitat survey

2.1.1 In order to update the Phase 1 habitat survey carried out by BSG Ecology in June and July 2020, Bioscan visited the site on 13th July 2022. Due to the availability of the existing Phase 1 survey, the purpose of this update survey was to verify the habitat types and conditions and/or identify any changes that have occurred onsite since 2020.

2.1.2 The methodology employed by Bioscan for the survey was based on the Phase 1 approach as devised by the former Natural Conservancy Council (now Natural England), as updated periodically by the Joint Nature Conservation Committee. This technique provides an inventory of the broad habitat types present within the study area and targets areas of more interest or those that might benefit from a more detailed survey if appropriate. A representative list of species was also compiled for each habitat.

2.1.3 In addition to the phase 1 habitat classification, the UK Habitat (UKHab) Classification system was also applied to each habitat parcel to assist with the BNG assessment. The condition of each parcel was then assessed according to Natural England's Habitat Condition Assessments.

2.2 Biodiversity audit

2.2.1 In order to quantify the site's baseline biodiversity value and the effect of the proposal on the measured biodiversity of the site, the Biodiversity Net Gain Metric 3.1 Calculation Tool was employed. This version of the biodiversity accounting tool and its accompanying guidance was published in its current form and approved for use by Natural England in May 2022.

2.2.2 The metric tool is an Excel-based interactive spreadsheet that allows key data parameters to be input and subjected to standardised formulae. The key input parameters are the baseline habitats, their extent and condition, and whether the site is located in defined ecological network such as a Conservation Target Area or Biodiversity Opportunity Area.

2.2.3 The Biodiversity Metric 3.1 'QGIS Template' was used to automate populating the metric tool and create a baseline habitat plan (see per Figure 1). The QGIS Template allows for habitat polygons to be categorised within QGIS based on existing/proposed habitat type and condition, to facilitate this being directly imported into the Metric via the 'GIS Import Tool', thus minimising the risk of any transcription errors occurring. These polygons were then consolidated by grouping together those polygons with the same habitat type and condition.



2.2.4 Inputs for the post-development assessment were calculated primarily using the Woodfield Brady Architect's General Layout plan (ref: 19112.003), which shows the extent of development and the layout of the proposed green spaces. The classification and future condition of these habitats was assigned based on professional judgement, taking into account relevant constraints, such as future recreational use.

3 RESULTS

3.1 Area based habitats

3.1.1 The following broad, area-based habitat types were recorded during the survey.

- Semi-improved grassland
- Species-poor, semi-improved grassland
- Improved grassland
- Mixed plantation woodland
- Allotments
- Tall ruderal
- Dense scrub
- Bare ground
- Building/hard-standing

3.1.2 Each habitat has been mapped on Figure 1 and is described in more detail below with reference to the dominant or more notable species identified, as well as any significant changes since BSG Ecology's 2020 survey. A full list of species recorded by Bioscan can be found in **Appendix 1**.

Semi-improved grassland (UKHab: other neutral grassland)

3.1.3 The southern field within the northern parcel of the site was previously characterised as semi-improved grassland, and, upon revisiting in 2022, this habitat description remains the most appropriate. Since 2020, sections of ruderal and scrub have encroached further into the grassland, and several of the previously cultivated allotment parcels have since been abandoned and are now a mosaic of remnant cultivated plants and grassland species.

3.1.4 The grassland comprises abundant false oat grass *Arrhenatherum elatius* and Yorkshire fog *Holcus lanatus* with frequent perennial ryegrass *Lolium perenne*, smooth meadow-grass *Poa pratensis* and red fescue *Festuca rubra*. Tufted hairgrass *Deschampsia cespitosa*, couch *Elymus repens* and barren brome *Bromus sterilis* are occasional to locally frequent. A variety of native forbs interspersed with ornamental escapees and remnants from allotment plots are also present, and include frequent field bindweed *Convolvulus arvensis*, bramble *Rubus fruticosus*, creeping thistle *Cirsium arvense* and domesticated lupin *Lupinus* sp, the latter is locally abundant in places. Occasional herbs found include common mugwort *Artemisia vulgaris*, great mullein *Verbascum thapsus*, prickly sow-thistle *Sonchus asper*, creeping thistle *Cirsium arvense* and agrimony *Agrimonia eupatoria*. Rarely found were bristly oxtongue *Helminthotheca echioides*, common field-speedwell *Veronica persica*, burdock *Arctium lappa* and wild parsnip *Pastinaca sativa*.

Allotments (UKHab: allotments)

3.1.5 Many of the allotment plots noted by BSG Ecology appear to have been abandoned since 2020, leaving a smaller patch of actively cultivated land (see **Figure 1**).

3.1.6 The remaining allotments comprise several distinct patches, separated with fencing. Courgette *Cucurbita pepo* and broad bean *Vicia faba* are among the currently cultivated crops. An assortment of common arable weeds was noted, including scarlet pimpernel *Anagallis arvensis*, common field-speedwell, enchanters' nightshade *Circaea lutetiana*, shepherd's purse *Capsella bursa-pastoris*, petty spurge *Euphorbia peplus* and wild pansy *Viola tricolor*.

Improved grassland (UKHab: modified grassland)

3.1.7 The northern field within the north parcel was previously noted to be an arable field, planted with wheat during the 2020 survey. At the time of Bioscan's visit in 2022 the field contained a grassland, and appears to have been drilled to create a ley or permanent pasture. The dominance of perennial ryegrass and the homogenous nature of the field suggests that it may have been seeded with a ryegrass mix.

3.1.8 Also abundant in the field are red and white clover *Trifolium pratense* and *T. repens* respectively. Occasional herbs include common poppy *Papaver rhoeas*, yarrow *Achillea millefolium* and bird's-foot trefoil *Lotus corniculatus*. More rarely found species include prickly lettuce *Lactuca serriola*, bristly oxtongue, common field-speedwell, black-grass *Alopecurus myosuroides*, broad-leaved dock *Rumex obtusifolius*, common vetch *Vicia sativa*, scented mayweed *Matricaria chamomilla* and tufted vetch *Vicia cracca*. Occasional remnants of the previously cultivated wheat *Triticum aestivum* crop were also noted.

Mixed plantation woodland (UKHab: other woodland; mixed)

3.1.9 A small patch of plantation woodland is present in the centre of the southern field within the north parcel. It was previously noted to be adjacent to several allotment plots, which have since been abandoned and now given way to a patch of tall ruderal vegetation.

3.1.10 The woodland comprises a mixture of young broadleaved and coniferous trees including English oak *Quercus robur*, ash *Fraxinus excelsior*, small-leaved lime *Tilia cordata*, silver birch *Betula pendula*, field maple *Acer campestre*, spruce *Picea* sp., spindle *Euonymus europaeus* and common beech *Fagus sylvatica*.

Tall ruderal (UKHab: ruderal/ephemeral)

3.1.11 Patches of tall ruderal vegetation are present throughout the site, especially within the northern parcel. Additional patches have colonised abandoned allotments and encroached further into the grassland than noted on the 2020 survey.

3.1.12 The vegetation predominantly comprises common nettle *Urtica dioica*, particularly on the western edge, just north of the allotments. Other species noted include

common hogweed *Heracleum sphondylium*, creeping thistle and broad-leaved willowherb *Epilobium montanum*.

Dense scrub (UKHab: bramble scrub)

- 3.1.13 Patches of dense scrub in the northern parcel were previously noted in the 2020 survey, and have encroached further on the grassland in places.
- 3.1.14 Bramble dominates, with pockets of wild raspberry *Rubus idaeus* and common hogweed also present.

Species-poor, semi-improved grassland (UKHab: modified grassland)

- 3.1.15 The development parcel to the south of the A415 comprises one field of species-poor, semi-improved grassland, divided by an east-to-west aligned temporary fence. The southern half had been grazed to a very low sward height by horses at the time of the 2022 survey, but there was little evidence to suggest that the flora of this area is significantly different to the northern portion.
- 3.1.16 Grasses dominate, with common bent *Agrostis capillaris*, cock's foot *Dactylis glomerata*, false oat grass, perennial ryegrass and Yorkshire fog all frequent to abundant. A patch of grassland with occasional meadow barley was also recorded at the western end of the field. Frequent herbaceous species include creeping buttercup *Ranunculus repens*, field bindweed and selfheal *Prunella vulgaris*. Occasionally found were hemlock *Conium maculatum*, dove's-foot crane's-bill *Geranium molle*, spear thistle *Cirsium vulgare* and wood dock *Rumex sanguineus*. More rarely found species include Germander speedwell *Veronica chamaedrys*, common vetch, cut-leaved crane's-bill *Geranium dissectum* and common mallow *Malva sylvestris*. Scattered ash and elm *Ulmus procera* saplings were also noted in the northern portion of the field.

Bare ground (UKHab: vacant/derelict land/bare ground)

- 3.1.17 Two small patches of bare ground are present in the south parcel, both comprise manure piles that were also noted in BSG Ecology's 2020 survey.

Building and hardstanding (UKHab: developed land; sealed surface)

- 3.1.18 Two wooden buildings on the south parcel, are used as horse stables, and were previously noted to have negligible intrinsic ecological value. Within the north parcel, the existing village hall (which is proposed to be retained and extended) and adjacent car park form a patch of hard-standing in the south-east corner.

4 BIODIVERSITY AUDIT

4.1 Habitat summary – pre-development

4.1.1 The Phase 1 habitat classifications have been translated to the UKHab terminology and the condition of each habitat noted for input into the metric. The condition sheets are provided at **Appendix 2**.

Table 1: existing habitats and the corresponding UKHab classification and habitat condition.

Phase 1	UKHab	Condition	Rationale
Semi-improved grassland	Other neutral grassland	Poor	Lacks composition and indicator species needed to achieve non-negotiable criterion 1 and so is assessed as being in 'poor' condition.
Species-poor semi-improved grassland	Modified grassland	Good	The southern parcel is poorer in species diversity and does not qualify for 'other neutral grassland', but achieves criteria sufficient to reach 'good' condition 'modified grassland'.
Improved grassland	Modified grassland	Poor	The northernmost field is widely homogenous and species-poor. It passes 5 of 7 criteria but fails non-negotiable criterion 1 – species diversity, so is classified as being in 'poor' condition.
Mixed plantation woodland	Other woodland; mixed	Moderate	The small patch of woodland has been recently planted (between 2004 and 2009) and lacks the vertical structure, age distribution and ground flora to achieve 'good' condition.
Allotments	Allotments	Poor	The remaining allotments lack the diversity of flowering species and vegetation structure to be classed higher than 'poor' condition.
Tall ruderal	Ruderal/ ephemeral	Moderate	The lack of diversity in flower plants limits the condition to 'moderate'.
Dense scrub	Bramble scrub	N/A	Condition locked to 'N/A'; no condition assessment is available for this habitat type.
Bare ground	Vacant/ derelict land/bare ground	Poor	The areas of bare ground were devoid of any vegetation and therefore are assessed as being in 'poor' condition.
Buildings/ hardstanding	Developed land; sealed surface	N/A	Condition locked to 'N/A – other'; no condition assessment is available for this habitat type.

4.2 Habitat summary – post-development

4.2.1 Based on the proposed development as shown on Woodfield Brady Architect’s General Layout plan (ref: 19112.003), **Figure 2** indicates which habitats will be lost and created, and which can be retained and enhanced. **Figure 3** shows the proposed habitats post-development.

Table 2: Post-development habitats and target conditions

UKHab	Target condition	Comment
Other neutral grassland	Good	Management of the northern field and two areas of this habitat in the south parcel can target key features such as a varied sward structure and therefore ‘good’ condition is considered to be achievable.
Modified grassland	Moderate	Formal open space around the proposed units is anticipated to be intensively managed and subject to a relatively high level of recreational use.
Allotments	Poor	Future condition will depend on how these are managed by the tenants of individual plots and ‘poor’ condition is therefore applied due to this uncertainty.
Developed land; sealed surface. Vegetated garden. Introduced shrub. Artificial unvegetated, unsealed surface.	N/A	The condition of these habitats is locked to ‘N/A’.

4.3 Biodiversity Net Gain assessment

4.3.1 Based on the pre- and post-development parameter detailed above, the headline results from the metric are shown below. In summary, the development is assessed to result in a measured net gain of 5.1 Biodiversity Units, equivalent to a **29.53%** increase.

- 4.3.2 Whilst the headline results indicate that the trading rules have not been met, this relates solely to the removal of the small area of woodland at the centre of the north parcel. Any replacement habitat for this should be within the same broad habitat type to achieve the trading rules, but at present, this is replaced by neutral grassland which has the same distinctiveness, but is in a different broad habitat type. The overall result from the metric is nevertheless, the same.
- 4.3.3 Proposed habitats and net gain are subject to revision upon completion of the landscape strategy, and therefore the headline results shown in this draft report are also subject to change. However, a net Biodiversity increase of 10% is determined to be readily achievable within this development.

Table 3: headline results from the Biodiversity Metric 3.1 tool

On-site baseline	<i>Habitat units</i>	17.27
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	22.36
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site net % change <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	29.53%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	5.10
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total on-site net % change plus off-site surplus <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	29.53%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%
Trading rules Satisfied?	No - Check Trading Summary ▲	

Figure 1

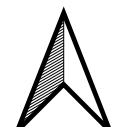
Habitat Map (2022)



Map data © 2022: Google, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, The GeoInformation Group

Key

- SI Semi-improved grassland (UKHab: other neutral grassland)
- SI Species-poor semi-improved grassland (UKHab: modified grassland)
- I Improved grassland (UKHab: modified grassland)
- Mixed plantation woodland (UKHab: other woodland; mixed)
- Dense scrub (UKHab: bramble scrub)
- Tall ruderal (UKHab: ruderal/ephemeral)
- A Allotment (UKHab: allotment)
- Building (UKHab: developed land; sealed surface)
- Hardstanding (UKHab: developed land; sealed surface)
- Bare ground (UKHab: vacant/derelict land/bare ground)



Title
Habitat Map (2022)

Project Clifton Hampden	Client Thomas Homes Ltd.
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Drawing No. Figure 1	Revision -	Project No. E2122
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Drawn RB	Checked SW	Date July 2022
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Figure 2

Habitat Retention Plan



Key

- Habitats to be retained
- Habitats to be lost/created
- Habitats to be enhanced

Title Habitat Retention Plan
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Project Clifton Hampden	Client Thomas Homes Ltd.
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Drawing No. Figure 2	Revision -	Project No. E2122
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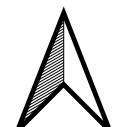


Figure 3

Proposed Habitat Plan



Key

- A Allotments
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Introduced shrub
- Modified grassland
- Other neutral grassland
- Vegetated garden

Title
Proposed Habitat Plan

Project Client
Clifton Hampden Thomas Homes Ltd.

Drawing No. Revision Project No.
Figure 3 - E2122

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Appendix 1 – Species List

Common name	Scientific name
Agrimony	<i>Agrimonia eupatoria</i>
Ash	<i>Fraxinus excelsior</i>
Barren Brome	<i>Anisantha sterilis</i>
Beech	<i>Fagus sylvatica</i>
Black-grass	<i>Alopecurus myosuroides</i>
Blackthorn	<i>Prunus spinosa</i>
Bramble	<i>Rubus fruticosus</i> agg.
Bread Wheat	<i>Triticum aestivum</i>
Bristly Oxtongue	<i>Helminthotheca echioides</i>
Broad-leaved Dock	<i>Rumex obtusifolius</i>
Broad-leaved Willowherb	<i>Epilobium montanum</i>
Canadian Fleabane	<i>Conyza canadensis</i>
Cleavers	<i>Galium aparine</i>
Cock's-foot	<i>Dactylis glomerata</i>
Common Bent	<i>Agrostis capillaris</i>
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>
Common Comfrey	<i>Symphytum officinale</i>
Common Couch	<i>Elytrigia repens</i>
Common Field-speedwell	<i>Veronica persica</i>
Common Mallow	<i>Malva sylvestris</i>
Common Nettle	<i>Urtica dioica</i>
Common Poppy	<i>Papaver rhoeas</i>
Common Ragwort	<i>Senecio jacobaea</i>
Common Vetch	<i>Vicia sativa</i> subsp. <i>segetalis</i>
Courgette	<i>Curcubita pepo</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Creeping Cinquefoil	<i>Potentilla reptans</i>
Creeping Thistle	<i>Cirsium arvense</i>
Cut-leaved Crane's-bill	<i>Geranium dissectum</i>
Dandelion	<i>Taraxacum officinale</i> agg.
Domesticated lupin	<i>Lupinus domesticus</i>
Dove's-foot crane's-bill	<i>Geranium molle</i>
Enchanter's-nightshade	<i>Circaea lutetiana</i>
English Elm	<i>Ulmus procera</i>
False Oat-grass	<i>Arrhenatherum elatius</i>
Field Bindweed	<i>Convolvulus arvensis</i>
Field Maple	<i>Acer campestre</i>
Garden Asparagus	<i>Asparagus officinalis</i>
Germander Speedwell	<i>Veronica chamaedrys</i>
Great Mullein	<i>Verbascum thapsus</i>
Greater Burdock	<i>Arctium lappa</i>

Greater Plantain	<i>Plantago major</i>
Groundsel	<i>Senecio vulgaris</i>
Hairy Tare	<i>Vicia hirsute</i>
Hazel	<i>Corylus avellana</i>
Hemlock	<i>Conium maculatum</i>
Hogweed	<i>Heracleum sphondylium</i>
Marjoram	<i>Origanum majorana</i>
Marsh Thistle	<i>Cirsium palustre</i>
Meadow Barley	<i>Hordeum secalinum</i>
Meadow Foxtail	<i>Alopecurus pratensis</i>
Mugwort	<i>Artemisia vulgaris</i>
Pedunculate Oak	<i>Quercus robur</i>
Perennial Rye-grass	<i>Lolium perenne</i>
Perforate St John's-wort	<i>Hypericum perforatum</i>
Petty Spurge	<i>Euphorbia peplus</i>
Prickly Lettuce	<i>Lactuca serriola</i>
Prickly Sow-thistle	<i>Sonchus asper</i>
Raspberry	<i>Rubus idaeus</i>
Red Clover	<i>Trifolium pratense</i>
Red Clover	<i>Trifolium pratense</i>
Red Fescue	<i>Festuca rubra</i>
Ribwort Plantain	<i>Plantago lanceolata</i>
Rosebay Willowherb	<i>Chamerion angustifolium</i>
Scarlet Pimpernel	<i>Anagallis arvensis</i>
Scented Mayweed	<i>Matricaria chamomilla</i>
Selfheal	<i>Prunella vulgaris</i>
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Silver Birch	<i>Betula pendula</i>
Small-leaved Lime	<i>Tilia cordata</i>
Smooth Meadow-grass	<i>Poa pratensis</i>
Spear Thistle	<i>Cirsium vulgare</i>
Tufted Hair-grass	<i>Deschampsia cespitosa</i>
Tufted Vetch	<i>Vicia cracca</i>
Wall Barley	<i>Hordeum murinum</i>
White Clover	<i>Trifolium repens</i>
White Clover	<i>Trifolium repens</i>
Wild Carrot	<i>Daucus carota subsp. Carota</i>
Wild Pansy	<i>Viola tricolor</i>
Wild Parsnip	<i>Pastinaca sativa</i>
Wild Teasel	<i>Dipsacus fullonum</i>
Wood Avens	<i>Geum urbanum</i>
Wood dock	<i>Rumex sanguineus</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire-fog	<i>Holcus lanatus</i>

Appendix 2

Condition assessments of baseline habitats

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
IMPROVED GRASSLAND			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	N	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N	
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
4	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	
6	Cover of bracken less than 20%.	Y	
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	
		Essential criterion 1 achieved (Y/N)	
		Number of criteria passed	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)	Y	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
SPECIES POOR SEMI IMPROVED GRASSLAND			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	Y	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N	
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
4	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	
6	Cover of bracken less than 20%.	Y	
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	
		Essential criterion 1 achieved (Y/N)	
		Number of criteria passed	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)		
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			

Condition Sheet: GRASSLAND Habitat Type (medium, high & very high distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Note Tall herb habitat that does not meet the Annex 1 definition should be recorded as "Other neutral grassland"] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
SEMI IMPROVED GRASSLAND			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB - This criterion is essential for achieving moderate condition for non-acid grassland types only.	N	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N	
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Y	
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area.	Y	
Additional Group (Non-acid types only)			

6	There are greater than 9 species per metre squared. NB - This criterion is essential for achieving good condition (non-acid grassland types only).	N	
Criterion 1 Achieved (Essential for good condition for non-acid grassland) (Y/N)			
			Number of criteria passed
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid Grassland Types			
Passes 5 of 5 criteria	Good (3)		
Passes 3 or 4 of 5 criteria	Moderate (2)		
Passes 0, 1 or 2 of 5 criteria	Poor (1)		
Non-acid grassland Types			
Passes 5 of 6 criteria, including essential criterion 1 and 6.	Good (3)		
Passes 3 or 4 of 6 criteria, including essential criterion 1.	Moderate (2)		
Passes 0, 1, 2 criteria of 6 criteria; OR Passes 3 or 4 criteria excluding criterion 1 and 6	Poor (1)	Y	
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1 - Species indicative of sub-optimal condition for this habitat type include: Creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i>, cow parsley <i>Anthriscus sylvestris</i>.</p>			

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral Urban – Allotments Urban – Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Bioswale Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] Urban - Vacant / derelict land / bare ground			
Site name/location		Onsite/offsite	
Central grid reference		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
ALLOTMENTS			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types :			
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	N	
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	N	
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be		
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		

4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.		
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
If 3 criteria assessed:			
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3	Good (3)		
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)		
• Passes 0 or 1 of 3 core criteria	Poor (1)	Y	
If 4 criteria assessed:			
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b	Good (3)		
• Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)		
• Passes 0 or 1 of 4 criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1: For Biodiverse green roofs only - experience has shown that a range of sedums species (native, naturalised, and non-native) support wildflowers during hot periods. Therefore, for Criteria 2 a Biodiverse green roof can have non-native sedums and still achieve Good condition.</p> <p>Footnote 2: For Criteria 3 – For green roof habitat types only - <i>Buddleja davidii</i> should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in sub-subsequent years.</p>			

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral Urban – Allotments Urban – Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Bioswale Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] Urban - Vacant / derelict land / bare ground			
Site name/location		Onsite/offsite	
Central grid reference		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
TALL RUDERAL			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types :			
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	Y	
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	N	
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be		
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		

4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.		
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
If 3 criteria assessed:			
<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3 	Good (3)		
<ul style="list-style-type: none"> • Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3 	Moderate (2)	Y	
<ul style="list-style-type: none"> • Passes 0 or 1 of 3 core criteria 	Poor (1)		
If 4 criteria assessed:			
<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b 	Good (3)		
<ul style="list-style-type: none"> • Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3 	Moderate (2)		
<ul style="list-style-type: none"> • Passes 0 or 1 of 4 criteria 	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1: For Biodiverse green roofs only - experience has shown that a range of sedums species (native, naturalised, and non-native) support wildflowers during hot periods. Therefore, for Criteria 2 a Biodiverse green roof can have non-native sedums and still achieve Good condition.</p> <p>Footnote 2: For Criteria 3 – For green roof habitat types only - <i>Buddleja davidii</i> should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in sub-subsequent years.</p>			

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral Urban – Allotments Urban – Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Bioswale Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] Urban - Vacant / derelict land / bare ground			
Site name/location		Onsite/offsite	
Central grid reference		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
BARE GROUND			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types :			
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	N	
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	N	
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be		
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		

4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.		
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
If 3 criteria assessed:			
<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3 	Good (3)		
<ul style="list-style-type: none"> • Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3 	Moderate (2)		
<ul style="list-style-type: none"> • Passes 0 or 1 of 3 core criteria 	Poor (1)	Y	
If 4 criteria assessed:			
<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b 	Good (3)		
<ul style="list-style-type: none"> • Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3 	Moderate (2)		
<ul style="list-style-type: none"> • Passes 0 or 1 of 4 criteria 	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1: For Biodiverse green roofs only - experience has shown that a range of sedums species (native, naturalised, and non-native) support wildflowers during hot periods. Therefore, for Criteria 2 a Biodiverse green roof can have non-native sedums and still achieve Good condition.</p> <p>Footnote 2: For Criteria 3 – For green roof habitat types only - <i>Buddleja davidii</i> should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in sub-sequent years.</p>			

Condition Sheet: WOODLAND Habitat Type					
UKHab Habitat Type(s)					
Woodland and forest - Lowland beech and yew woodland Woodland and forest - Lowland mixed deciduous woodland Woodland and forest - Native pine woodlands Woodland and forest - Other coniferous woodland Woodland and forest - Other Scot's pine woodland Woodland and forest - Other woodland; broadleaved Woodland and forest - Other woodland; mixed Woodland and forest - Upland birchwoods Woodland and forest - Upland mixed ashwoods Woodland and forest - Upland oakwood Woodland and forest - Wet woodland					
Site name/location		Onsite/offsite			
Habitat's Central Grid		Unique polygon			
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)			
Habitat Description					
MIXED WOODLAND					
See UKHab This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: Woodland Wildlife Toolkit (sylva.org.uk)					
Condition Assessment Criteria					
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes/Justification
1 Age distribution of trees ¹	Three age classes present	Two age classes present	One age class present	2	
2 Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ²	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland	3	
3 Invasive plant species ³	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	3	
4 Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel	3	
5 Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	< 50% of canopy trees and <50% of understory shrubs are native	3	

6	Open space within woodland⁴	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	3	
7	Woodland regeneration⁵	All three classes present in woodland; trees 4-7cm dbh, saplings and seedlings or advanced coppice regrowth	One or two classes only present in woodland	No classes or coppice regrowth present in woodland	1	
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	3	
9	Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	1	
10	Woodland vertical structure⁶	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots	1	
11	Veteran trees⁷	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1	
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1	
13	Woodland disturbance⁸	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	3	

Total Score

Condition Assessment Result	Condition Assessment Score	Result Achieved
Total score >32 (33 to 39)	Good (3)	Moderate
Total score 26 to 32	Moderate (2)	
Total score <26 (13 to 25)	Poor (1)	

Suggested enhancement interventions to improve condition score



Appendix 3

Target condition assessments of proposed habitats

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
MODIFIED GRASSLAND			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	Y	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N	
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
4	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	
6	Cover of bracken less than 20%.	Y	
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	
		Essential criterion 1 achieved (Y/N)	
		Number of criteria passed	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)	Y	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			

Condition Sheet: GRASSLAND Habitat Type (medium, high & very high distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Note Tall herb habitat that does not meet the Annex 1 definition should be recorded as "Other neutral grassland"] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
OTHER NEUTRAL GRASSLAND			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB - This criterion is essential for achieving moderate condition for non-acid grassland types only.	Y	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Y	
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area.	Y	
Additional Group (Non-acid types only)			

6	There are greater than 9 species per metre squared. NB - This criterion is essential for achieving good condition (non-acid grassland types only).	Y	
Criterion 1 Achieved (Essential for good condition for non-acid grassland) (Y/N)			
			Number of criteria passed
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid Grassland Types			
Passes 5 of 5 criteria	Good (3)		
Passes 3 or 4 of 5 criteria	Moderate (2)		
Passes 0, 1 or 2 of 5 criteria	Poor (1)		
Non-acid grassland Types			
Passes 5 of 6 criteria, including essential criterion 1 and 6.	Good (3)	Y	
Passes 3 or 4 of 6 criteria, including essential criterion 1.	Moderate (2)		
Passes 0, 1, 2 criteria of 6 criteria; OR Passes 3 or 4 criteria excluding criterion 1 and 6	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1 - Species indicative of sub-optimal condition for this habitat type include: Creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i>, cow parsley <i>Anthriscus sylvestris</i>.</p>			

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral Urban – Allotments Urban – Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Bioswale Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] Urban - Vacant / derelict land / bare ground			
Site name/location		Onsite/offsite	
Central grid reference		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
ALLOTMENTS			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types :			
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	N	
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	N	
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be		
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		

4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.		
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
If 3 criteria assessed:			
<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3 	Good (3)		
<ul style="list-style-type: none"> • Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3 	Moderate (2)		
<ul style="list-style-type: none"> • Passes 0 or 1 of 3 core criteria 	Poor (1)	Y	
If 4 criteria assessed:			
<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b 	Good (3)		
<ul style="list-style-type: none"> • Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3 	Moderate (2)		
<ul style="list-style-type: none"> • Passes 0 or 1 of 4 criteria 	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
<p>Footnote 1: For Biodiverse green roofs only - experience has shown that a range of sedums species (native, naturalised, and non-native) support wildflowers during hot periods. Therefore, for Criteria 2 a Biodiverse green roof can have non-native sedums and still achieve Good condition.</p> <p>Footnote 2: For Criteria 3 – For green roof habitat types only - <i>Buddleja davidii</i> should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in sub-subsequent years.</p>			



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